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Approved For Release 2003/01/28 : CIA-RDP61-00763A000200020098-4

DPD 4673-59

6 August 1959

25X1A

MEMORANDUM FOR: [redacted]

SUBJECT : Monthly Listing of Technical Proposals or New Ideas in Scientific Methods of Collection

1. The attached list is circulated for information of the addresses. It is planned to meet this month on Monday, 10 August 1959, at 2 o'clock P. M. in the East Building Conference Room. ([redacted] 25X1A and the undersigned will discuss and answer any questions with regard to the recent ATIC trip.

2. Addressees are advised that these proposals or ideas should be discussed with nonparticipating personnel (other than addressees superiors) only after communicating with the office originating the proposal or idea. This caution is inserted to avoid unnecessary extension of knowledge and use of certain proposals.

[redacted]

Special Requirements Staff
DPD-DD/P

25X1A

25X1A Attachment

SRS/DPD-DD/P: [redacted] :lzt

25X1A Distribution:

Orig. - SRS/DPD-DD/P

[redacted]

1 - SRS/DPD-DD/P

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ELINT Staff Officer

1. Semiconductor Solid Circuits: Texas Instruments, Inc., Dallas, Texas, has developed techniques for providing electronics circuity composed completely of semiconductor material. By diffusion, metalic evaporation, alloying and chemical forming, a single semiconductor wafer is made to perform the function of a complete circuit. This technique is expected to provide subminiaturization of many circuits. TI claims that they have been able to provide component density of 30 million to the cubic foot as compared to 50 to 75 thousand with standard electronic components. Research is continuing and sample quantities may be available during 1959. The ESO expects to obtain additional information through several personal contacts at TI.

2. Frequency Sensitive Attenuators: Stanford University has called attention to RADITE No. 75, a material whose attenuation is proportional to frequency of the electromagnetic signal applied. Information available indicates at S Band an accuracy of plus or minus 15 mc/s can be obtained in using this material as a frequency measuring device. The material will satisfactorily measure frequency over a 15 db range in power. By utilizing instantaneous automatic gain circuits (IAGC), Stanford has been able to utilize the material over a 50 db range in power. Details on the producer of the material are not known but will be obtained and provided by the ESO.

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